

CLAIMS

What is claimed is:

1. A method of manufacturing a catalytic converter comprising the steps of:
 - a) placing a first liner into a second liner, the first liner containing a catalyst;
 - b) plastically deforming opposing ends of the liners into engagement with one another forming a cavity between the liners; and
 - c) securing first and second connecting tubes to the opposing ends.
2. The method according to claim 1, wherein the liners are cylindrical in shape.
3. The method according to claim 1, wherein step b) forms a conical flange having portions of the first and second liners overlapping and engaging one another.
4. The method according to claim 3, wherein step c) includes welding the connecting tubes to the flanges of the opposing ends.
5. The method according to claim 1, wherein step b) forms a sealed cavity between the first and second liners.
6. The method according to claim 5, wherein the liners are spaced from one another approximately 0.25 inch or less forming an air gap.

7. The method according to claim 6, wherein the air gap extends circumferentially about the first liner and catalyst.
8. A catalytic converter comprising:
 - a first liner housing a catalyst; and
 - a second liner arranged about the first liner in spaced relationship therewith forming a sealed cavity providing an air gap about the circumference of the first liner extending at least a length of the catalyst.
9. The catalytic converter according to claim 8, comprising opposing ends of said first and second liners tapered inwardly and in engagement with one another forming said sealed cavity.
10. The catalytic converter according to claim 9, comprising connecting tubes secured to said opposing ends by weld beads.
11. The catalytic converter according to claim 10, wherein said liners and connecting tubes have a generally cylindrical cross-section.